LATE REPORT FOR SWAN ISLAND, WEST INDIES

TABLE 1.—*Mean free-air barometric pressure in millibars, temperature in degrees centigrade, and relative humidities in percent obtained by radiosondes during June 1945*

STATION AND ELEVATION IN METERS ABOVE SEA LEVEL

Altitude (meters) m. s. l.	Swan Island, West Indies (10 m.)				Altitude (meters) m. s. l.	Swan Island, West Indies (10 m.)			
	Number of observations	Pressure	Temperature	Relative humidity		Number of observations	Pressure	Temperature	Relative humidity
Surface	30	1,012	26.7	84	7,000	30	433	−13.0	
500	30	958	23.5	83	8,000	30	379	−19.1	
1,000	30	904	20.6	77	9,000	29	330	−26.5	
1,500	30	853	18.1	69	10,000	28	287	−34.2	
2,000	30	804	15.9	58	11,000	26	248	−42.2	
2,500	30	758	13.6	50	12,000	26	213	−50.3	
3,000	30	714	10.7	47	13,000	25	183	−58.3	
4,000	30	633	4.8	45	14,000	21	155	−65.6	
5,000	30	559	−1.2	45	15,000	18	132	−72.1	
6,000	30	492	−7.4	45	16,000	7	111	−76.2	

RIVER STAGES AND FLOODS

By C. R. JORDAN

Precipitation during July was very irregular. Rainfall was generally above normal over the eastern half of the country, except in the Lakes region and a strip extending southwestward through northern Illinois, southern Iowa, and northern Missouri. It was also heavy in northeastern Nevada, southern Idaho, northern Utah, and north-central Arizona. Elsewhere over the western part of the United States precipitation was mostly light, with no measurable rainfall in parts of California and Oregon. The month ended with a torrential rainstorm in the vicinity of Washington, D. C., where 6 inches of rain fell in 50 minutes.

By far the most important flooding of the month was the local overflow of smaller streams that resulted from heavy concentrations of rainfall in the region from Virginia to Maine and did considerable damage. Some overflow was reported in the West-Central States, with near record stages recorded for a few of the smaller streams.

Atlantic Slope drainage.—Rainfall during July was frequent and above normal over the entire Atlantic coastal area. Local concentrations produced destructive and record-breaking stages at scattered locations throughout the area.

A severe downpour in Rutland County, Vt., on July 20 and a series of cloudbursts over western Berkshire County, Mass., on July 22 resulted in the loss of two lives and caused considerable damage to highways, bridges, crops, and livestock. The United States Geological Survey reports that Rathbun Brook near Hancock, Mass., with a drainage area of slightly less than 1 square mile, indicated a discharge of more than 3,200 c. f. s. per square mile. This is believed to be the highest rate of flow of record in New England on a per-square-mile basis. The maximum discharge of record was measured on the Poultney River below Fair Haven, Vt.

Albany, N. Y., experienced the wettest July since 1871. Much of the precipitation occurred in thunderstorms of cloudburst proportion, and numerous flash floods were reported during the month. The following report of floods occurring on July 22 was received from the Official in Charge, Weather Bureau Office, Albany, N. Y.:

Flash floods occurred in the Lake Section of Rensselaer County in the small streams of Rensselaer and Columbia Counties during the afternoon and evening of July 22, 1945, as a result of intense thundershowers which occurred from the city of Albany eastward during the period from about noon to between 4 and 5 p. m. The greatest official measurement of rain was 5.06 inches at the Mount Lebanon station which is located just south of West Lebanon, but unofficial reports support the belief that much heavier falls occurred elsewhere. There appear to have been at least two areas of intense rainfall: the Burden Lake-Glass Lake-Taborton section and a strip from about Brainard Station on Highway 20 east-northeastward over Stephentown and Hancock toward Lanesboro, Mass. Dry creek beds became raging torrents; lake levels were raised 2 or 3 feet; headwater creeks rose to record heights, washing out bridges, highways, and railroads, and wrecking farmlands. It has been estimated that damage from this storm will approach, if not exceed, $3,500,000, not counting the permanent damage to farmlands nor the current crop damage accurately. Three lives were lost in the floods, two at Hancock, Mass., and one, a child, at Garfield, N. Y.

An intense storm occurred between 7 and 11 p. m. on July 9 in the Easton, Pa.-Phillipsburg, N. J., area. Official measurements record 8.54 inches of rain at Phillipsburg and 6.20 inches at Easton. The storm was accompanied by intense lightning, and large damage from hail and wind was reported in suburban areas. The Monocacy, Bushkill, Catassaqua, and Hokendauqua Creeks overflowed their banks and caused considerable damage by inundation and soil erosion. Rivers in the area did not overflow.

Exceptionally heavy rains in northeastern New Jersey during the period July 15 to 23, and particularly from two storms when the rainfall intensity was the greatest, namely, July 18 and July 22–23, produced new flood records in Pasack Brook, Ramapo River, Saddle River, and Weasel Brook. The Passaic River at Paterson, N. J., reached a stage just exceeding that of the flood of March 1936, but considerably below that of the historic flood of October 1903. However, damage from flooding and washing was far greater than in March 1936.

Flood stages on the larger rivers were exceeded only slightly at a few scattered stations.

Upper Mississippi and Missouri Basins.—Excessive rain occurring in the Root and Whitewater River Valleys on July 20 and 21 caused minor flash floods in those drainage areas, with bankful or flood stages at Houston and Beaver, Minn., on July 21.

The Solomon River overflowed twice at Beloit, Kans., with a crest on July 5 that was only slightly above bankful and a second crest of 27.83 feet, 9.8 feet above bankful, on July 19. There was no resulting overflow of this river at Minneapolis, but Niles reached a crest of 28.25 feet, 4.25 feet above flood stage on July 21. Overflow of the Smoky Hill River occurred below the mouth of the Solo-